

STATE OF SOUTH DAKOTA CLASS SPECIFICATION

Class Title: Environmental Senior Scientist

Class Code: 51478

A. Purpose:

Manages statewide environmental program(s) and serves as a technical expert to senior management and public entities in a program area to ensure effective management of the state's natural resources and to protect human health and the environment.

B. Distinguishing Feature:

Environmental Senior Scientists manage statewide program(s) that consist of several smaller programs and projects, serve as team leaders over other environmental scientists, provide expert advice to senior management and other state and federal agencies, and are experts on technical issues within their program areas.

Environmental Program Scientists have primary responsibility for statewide, multi-faceted environmental program(s) that require extensive interdisciplinary coordination among several other programs within the department and federal, state, and local agencies.

C. Functions:

(These are examples only; any one position may not include all of the listed examples nor do the listed examples include all functions which may be found in positions of this class.)

1. Develops, implements, and manages statewide environmental programs to achieve state, federal, and/or local goals.
 - a. Establishes goals, performs long range planning, and sets priorities.
 - b. Represents the department in a program area and manages activities with federal, state, and local agencies.
 - c. Conducts scientific research.
 - d. Directs and/or develops procedures for inspections, permitting, licensing, enforcement, and other activities.
 - e. Develops or evaluates and approves standards and criteria established by subordinate staff.
 - f. Proposes, implements and enforces departmental policies.
 - g. Manages grants, projects, and funds.
2. Assesses and oversees environmental impact of programs, projects, and plans in order to ensure there are no negative effects to the environment while facilitating the state's long range goals.
 - a. Reviews and approves reports submitted by professional personnel.
 - b. Evaluates and assesses deficiencies in the program and recommends corrective actions.
 - c. Reviews and recommends approval of environmental studies and plans.
 - d. Reviews recommended enforcement action and permits pertaining to the program.
3. Provides technical expertise to management on complex issues to facilitate informed decisions on statewide policies.
 - a. Formulates departmental and state comments on environmental impact statements and assessments.
 - b. Serves as a technical/scientific spokesman for the department.
 - c. Provides expert testimony for legislative committees, administrative and judicial hearings, public hearings, and court actions.

- d. Negotiates interagency agreements with state and federal agencies.
- 4. Reviews, prepares, and recommends legislation, administrative rules, budgets, policies, and procedures to ensure that program goals are achieved.
- 5. Prepares highly technical environmental impact statements or natural resources reports on health hazards, environmental control, and ecological assessments to effectively utilize and protect natural resources while accomplishing the state's long range goals.
- 6. Functions as a team leader over assigned professional positions and oversees work of individuals who are not subordinates to ensure that program objectives are met.
 - a. Provides technical expertise.
 - b. Approves data evaluation and reports.
 - c. Directs inspections and determines enforcement activities.
 - d. Reviews and recommends approval of permits pertaining to the program.
- 7. Performs other work as assigned.

D. Reporting Relationships:

Reports to a Natural Resources Administrator. Does not supervise but is a team leader over other professional positions.

E. Challenges and Problems:

Challenged to make accurate assessments of threats to the environment which requires a thorough understanding of the affected environmental system, and of the methodology available to make assessments. After assessments are made, the incumbent decides what action is necessary, including development of standards, to prevent damage to the environment.

Problems include making sound scientific assessments of effects on the environment, determining areas of greatest need, and recommending the allocation of resources.

F. Decision-making Authority:

Decisions include whether criteria or standards are adequate, whether there is an environmental impact of specific projects, how to implement programs and projects, what immediate response is necessary to limit or prevent environmental degradation from spill incidents, assigning work to subordinates, determining the quality of the staff's work, approval of standards and conditions on permits prepared by subordinates, and selecting the methodology and procedures to use in a program.

Decisions referred to a superior include program decisions that are highly controversial; final approval of draft regulations and statutes; final approval of enforcement actions; the extent of state involvement and funding for clean up of regulated substance spills; approval of staffing levels for programs; and approval of final reports going to management, other state agencies, or the federal government.

G. Contact with Others:

Daily contact with department staff in other divisions to exchange information, coordinate projects, and offer technical assistance; and with federal regulatory agencies to develop criteria

and standards for projects, report on project status, and obtain interpretations of regulations. Frequent contact is made with the general public to explain statutes and regulations and offer technical assistance.

H. Working Conditions:

Field evaluations may involve outdoor work in all types of weather on construction sites, hazardous material sites, and waste water and water treatment plants, and around oil, mines, and gas and water wells. Potential exposure to hazardous chemicals, radiation, poisonous gases, and infectious bacteria.

I. Knowledge, Skills, and Abilities:

Knowledge of:

- environmental principles and practices as they apply to the control of water supply, water pollution, air pollution, pesticides, occupational health hazards, or solid waste;
- chemical, biological, and physical characteristics of water, wastewater, air pollutants, occupational hazards, or solid waste as it relates to their control, measurement, and environmental effects;
- federal and state laws, rules, and regulations relating to environmental control;
- department policies and procedures;
- personnel matters such as scheduling leave and training, and making recommendations for promotions or pay increases;
- the principles and procedures for supplying expert testimony;
- techniques of administrative and regulatory investigation;
- the principles of enforcing administrative law;
- human relations sufficient to provide work direction to other professionals;
- communications sufficient to interpret and convey regulatory requirements to the regulated community and the general public, and present and defend the regulatory requirements of the department.

Ability to:

- determine pollutant limits which are environmentally sound and economically feasible;
- develop program policies and procedures, and define operating standards;
- evaluate program effectiveness and recommend alternatives and enhancements;
- plan, direct, and coordinate the work of other professionals;
- communicate expectations and standards of performance and follow up and monitor work as performed;
- organize and analyze available information and draw sound conclusions;
- identify and define problems and place them in appropriate order;
- conceptualize needed change and initiate appropriate activities to develop and implement;
- communicate information clearly and concisely and develop ideas in a logical sequence;
- favorably present and promote departmental priorities, services, and actions internally and externally;
- apply policies and procedures uniformly;
- recognize situations of potential liability to the department and take appropriate action.